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A NEW SUBSPECIES OF MEXICAN CORAL SNAKE.

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Two specimens of coral snakes from northeastern Mexico can not be referred to any described form. They appear, however, to be related to *Micrurus fitzingeri* of central Mexico. In reference to the reduction of the yellow rings, we name the race

Micrurus fitzingeri microgalbineus, subsp. nov.

Type.—E. H. Taylor—H. M. Smith Coll. No. 27,847, 7 kilometers south of Antiguo Morelos, Tamaulipas, Mexico, collected June 21, 1941, by Bryce C. Brown. Adult female. *Paratype*. E.H.T.—H.M.S. No. 5,515, 18 kilometers north of Valles, San Luis Potosi, collected by E. H. Taylor. Adult male.

Diagnosis.—A coral snake closely related to *Micrurus f. fitzingeri*; black rings 18 to 19 on body, their length averaging 4.6 (4 to 6) scale lengths dorsally; length of red rings averaging 7 (5 to 10) ventral and 6 (4 to 8) dorsal scale lengths; yellow rings covering no more than one scale length; yellow parietal ring very narrow; black caudal rings 4 to 5; ventrals in male 203, in female 225; caudals in male 43, in female 32; no supra-anal tubercles.

Description of type.—Scutellation normal; 7-7 supralabials and infra-labials; one preocular, touching nasal; two postoculars; temporals 1-1-2; anterior chin-shields about two-thirds length of posterior; scale rows 15 throughout length of body; ventrals 203; subcaudals 43, all double; total length 609 mm., tail 54 mm.

Anterior black spot on head covers snout, mental, anterior three and one-half labials, and extends dorsally to and including the anterior two-fifths of the parietals; yellow parietal ring narrow dorsally (a little less than one-third length of parietals), widening laterally to include one-half of the fourth, all of the fifth and sixth, and one-third of the seventh labials; nineteen black bands, the first covering five scale rows on the neck, the posterior tip of the parietals and most of the seventh labial; first black band connecting dimly below with the black on tip of chin; the rest of the black bands covering four to five scale lengths above and three to four

ventrals below; yellow bands no more than one scale length wide dorsally (usually about one-half scale wide); ventrally the yellow is almost absent; dorsally the red bands cover six to eight (average 7.1) scale lengths, and most of the red scales bear black flecks of various sizes; ventrally the red covers 7 to 10 (average 8.4) ventrals, most of which bear black flecks confined to their posterior edges; tail with four black bands and a small black tip; yellow caudal bands covering one-half to one and one-half scale lengths dorsally.

Paratype.—The paratype is described by Taylor, Univ. Kans. Sci. Bull., vol. 26, 1939 (1940), pp. 484–485. It has no supra-anal tubercles.

Remarks.—*Micrurus fitzingeri microgalbineus* appears to be more closely related to *Elaps fitzingeri* Jan (Rev. Mag. Zool., 1858, p. 521, pl. A, fig. 2 [in color]) than to any other known species of the genus. The latter species is described as follows (a loose translation from the original French): "Anterior part of head black up to the [anterior edge] of the parietals. Temporals 1–1–2; 19 to 21 black rings on the body, each bordered in front and behind by white [yellow], which on the anterior part of the body occupies two rows of scales above and two ventral plates below, but on the rest of the body only one row of scales above and one plate below. In the red spaces some of the scales have a black tip; ventrally the same areas have small black spots. The red is totally absent on the tail, where one observes six black rings separated by white [yellow] rings. Total length of the specimen measured 36 inches; tail, 5 inches. Ventrals 222; subcaudals 55." The figure shows that the black rings cover about three scale lengths on the anterior part of the body, the red rings two to three scale lengths; the yellow band in the temporal region is very broad and covers all except the extreme anterior edge of the parietals. The specimens are said to be from Mexico.

Three specimens of *Micrurus* in the United States National Museum apparently belong to *fitzingeri*. These are Nos. 10,231 and 14,432 from Guanajuato, Mexico (Dugès collector), and No. 111,334 from the highway 12 or 13 kilometers north of Cuernavaca, Morelos, collected by H. M. Smith. The latter was taken at an elevation of about 6,000 feet, well within the evergreen zone. No descriptions of *fitzingeri* have appeared since the publication of several figures by Jan and Sordelli (Icon. Gén., livr. 42, 1872, pl. 2, fig. 3), and therefore it is of interest to record certain data from these specimens. A color description follows:

The snout and chin are black, without light spots; the yellow parietal ring covers all except the extreme anterior and, in two (Nos. 14,432 and 111,334) the extreme posterior tips of the parietals; the yellow rings on the anterior part of the body cover one and one-half or two scale lengths dorsally, but decrease in width posteriorly until they cover from slightly less to slightly more than one scale length. The anterior two or three red rings cover from four to seven scale lengths middorsally but most of the other red rings cover three to five (average 4.3) scale lengths. There are 19 to 24 black rings on the body, 4 to 6 on the tail. The anterior black rings cover five or six scale lengths dorsally, while the remainder cover a minimum of three and a maximum of five (usually about four) scale lengths.

The black rings cover from three to seven ventral scales (in No. 14,432, usually six; in the others, about four; average of all, 4.4) and the interspaces average slightly narrower (in No. 14,432) to a half longer than the black areas. The light rings on the tail cover from one and one-half to three scale lengths.

Micrurus fitzingeri microgalbineus differs from *f. fitzingeri* in having (1) the yellow rings covering no more than one scale length on any part of the body, while in *f. fitzingeri* they are a little broader, anteriorly twice as broad; (2) a very narrow, yellow, parietal ring, covering about a third of the length of the parietals (two-thirds or more in *f. fitzingeri*); (3) a somewhat smaller number of black rings on the body (18 to 19 as opposed to 19 to 24 in *f. fitzingeri*); and (4) generally a higher average number of dorsal scale lengths in the red areas (4 to 8, average 6.2, as opposed to 2 to 6, average 4.3 scale lengths, in *f. fitzingeri*). The extent of variation which may occur in these characters can not now be determined; the third and fourth characters may be expected to show a normal overlap greater than that now evident, while the others may not. The differences between the two races are obviously small, and appear significant only because of apparent geographic isolation. For this reason, and since there is no obviously impassible barrier between the indicated ranges of *f. fitzingeri* and *f. microgalbineus*, we believe intergradation highly probable and therefore regard the two forms as subspecies.

The only other species from areas near that where *f. microgalbineus* occurs are *fulvius tenere* and *affinis affinis*, but these show differences so numerous and obvious that the relationship with either does not seem close. *M. f. tenere* has fewer black rings on the body (10 to 15, average 12.4, in 30 specimens); the yellow rings on the body are broad and even, no less than one and one-half scale rows wide; the yellow parietal band includes no less than two-thirds the length of the parietal; the black rings (usually also the red ones) are broader and seldom involve less than six scale lengths on the middorsal line; and the caudal black rings average fewer (two to four, average three, in 29 specimens). In *affinis affinis* the black rings are much narrower, covering two or three scale lengths; the yellow rings may or may not be narrower, and are sometimes obsolete; and in at least the northern specimens the black rings are fewer in number (11 to 14 in four counts).

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